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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/779,478	02/09/2001	Toru Yamaguchi	018842.1162	9443

24735 7590 09/22/2003

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EXAMINER

LEO, LEONARD R

ART UNIT PAPER NUMBER

3743

DATE MAILED: 09/22/2003

16

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/779,478

Applicant(s)

YAMAGUCHI ET AL

Examiner

Leonard R. Leo

Art Unit

3743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 09 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 7-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

The amendment filed July 9, 2003 has been entered. Claims 1-12 are pending, claims 7-12 remain withdrawn.

#### *Claim Objections*

Claims 1 and 3 are objected to because of the following informalities: the recitation of “a length (T) an outer surface and an inner surface” should read -- a length (T) *of* an outer surface and an inner surface --. Appropriate correction is required.

#### *Claim Rejections - 35 USC § 112*

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-6 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

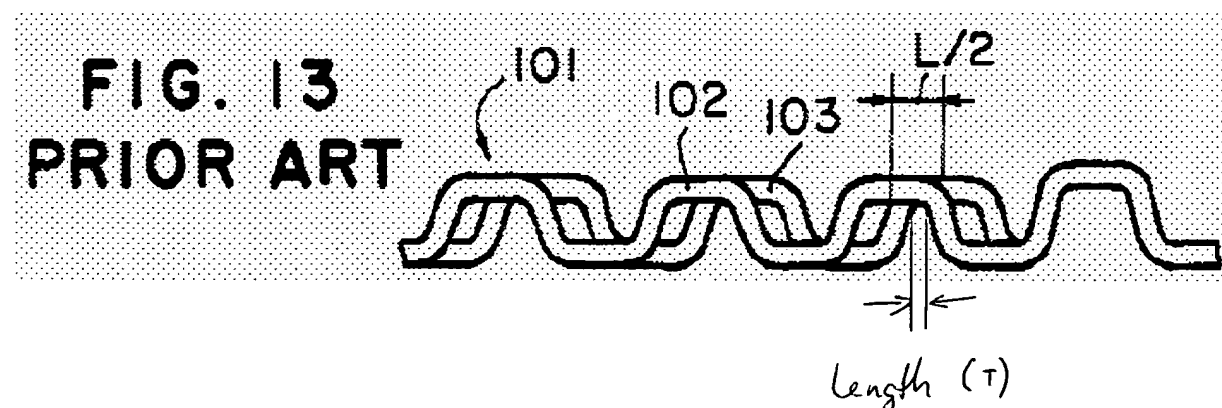
The specification as originally filed lacks an adequate written description of the invention. There is no support for “a length (T) of *an outer surface and an inner surface*.” As disclosed with respect to Figure 5 (page 8), the connecting portion length (T) is determined by the distance between first and second critical points in the upper portion of the fin and/or the distance between third and fourth critical points in the lower portion of the fin. As shown in Figure 5 below, the connecting portion length (T) is determined by critical points on the inner



### *Response to Arguments*

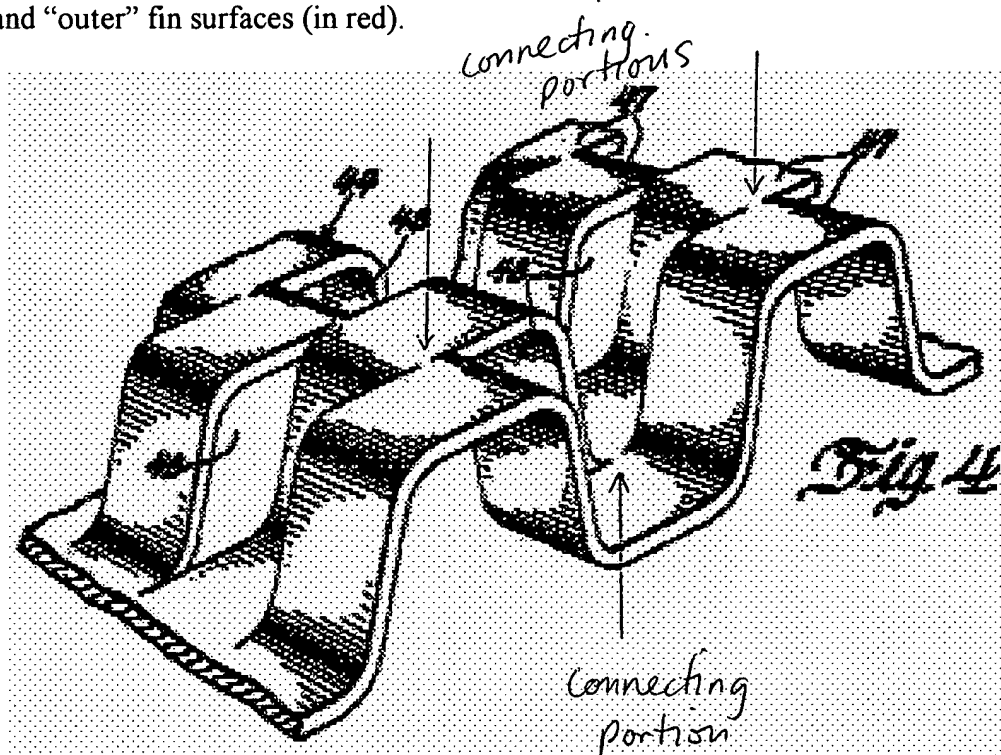
Initially, applicants' remarks are not commensurate in scope with the claims. Specifically, a "rolling process" is not being claimed. Method claims 11-12 reciting a "rolling process" are withdrawn from consideration. In apparatus claims, the "structure" must define over the prior art. The independent claims 1 and 3 do not recite how the "connecting portion" is determined. As such, the "connecting portion" may be a length (T) along an entire length or a portion thereof. Dependent claims 2 and 4 set forth the criteria on determining the length (T). However, the claims do not recite which surface the critical points are located, i.e. inside or outside surface of the fin.

With respect to Tomoko (JP 7-280484), applicants are determining the connecting portion length (T) based on critical points inconsistent with applicants' claims and specification. As shown below, applicants have determined the length (T) is the distance between a first critical point located at the intersection of the first flat portion of the one strip (foreground) and the first inclined portion of the adjacent strip (background) and a second critical point located at the intersection of first flat portion of the adjacent strip (background) and the second inclined portion of the one strip (foreground). If applicants' definition of critical points were employed to determine the connecting portion length (T), then the distance would be less than the thickness (in red).



Art Unit: 3743

With respect to Figure 4 of Gerstung et al, connecting portions are not reference labeled but are defined by the uncut portions. Contrary to applicants' belief, the figure discloses both "inner" and "outer" fin surfaces (in red).



Again, the uncut portions are intersections between the "flat portions" of adjacent waving strips. The uncut portions between the rightmost waving strip and the adjacent waving strip show the "connecting portions" have the same length on the "outer" surface of the fin and the "inner" surface of the fin. Thus, the length of the "connecting portion" is constant throughout the fin thickness.

No further comments are deemed necessary at this time.

***Conclusion***

This application contains claims 11-12 drawn to an invention nonelected with traverse in Paper No. 6. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

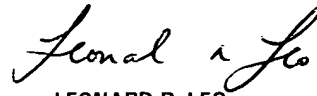
Any inquiry of a general nature, relating to the status of this application or clerical nature (i.e. missing or incomplete references, missing or incomplete Office actions or forms) should be directed to the Technology Center 3700 Customer Service whose telephone number is (703) 306-5648. Status of the application may also be obtained from the Internet: <http://pair.uspto.gov/cgi-bin/final/home.pl>

Application/Control Number: 09/779,478

Page 7

Art Unit: 3743

Any inquiry concerning this Office action should be directed to Leonard R. Leo whose telephone number is (703) 308-2611.

A handwritten signature in cursive script that reads "Leonard R. Leo".

LEONARD R. LEO  
PRIMARY EXAMINER  
ART UNIT 3743

September 20, 2003